[0075] 17. Zemanick, E. T., Wagner, B. D., Robertson, C. E., Stevens, M. J., Szefler, S. J., Accurso, F. J. et al. Assessment of airway microbiota and inflammation in cystic fibrosis using multiple sampling methods. *Ann Am Thorac Soc.* 2015; 12: 221-229.

[0076] 18. Lee T J, Fu C H, Wang C H, et al. Impact of chronic rhinosinusitis on severe asthma patients. PLoS ONE. 2017; 12(2):e0171047.

[0077] 19. Dixon A E, Kaminsky D A, Holbrook J T, Wise R A, 5hade D M, Irvin C G. Allergic rhinitis and sinusitis in asthma: differential effects on symptoms and pulmonary function. Chest. 2006; 130(2):429-435.

[0078] 20. Ramakrishnan V R, Hauser L J, Feazel L M, Ir D, Robertson C E, Frank D N. Sinus microbiota varies among chronic rhinosinusitis phenotypes and predicts surgical outcome. J Allergy Clin Immunol. 2015; 136 (2):334-342. e1.

[0079] 21. Mandavinia M, Engen P A, LoSavio P S, et al. The nasal microbiome in patients with chronic rhinosinusitis: Analyzing the effects of atopy and bacterial functional pathways in 111 patients. J Allergy Clin Immunol. 2018; 142:287-290.

[0080] 22. Fokkens W J, Lund V J, Mullol J, et al. EPOS 2012: European position paper on rhinosinusitis and nasal polyps 2012. A summary for otorhi-nolaryngologists. Rhinology. 2012; 50(1):1-12.

[0081] 23. Cardenas P A, Cooper P J, Cox M J, et al. Upper airways microbiota in antibiotic-naive wheezing and healthy infants from the tropics of rural Ecuador. PLoS ONE. 2012; 7(10):e46803.

[0082] 24. Teo S M, Mok D, Pham K, et al. The infant nasopharyngeal microbiome impacts severity of lower respiratory infection and risk of asthma development. Cell Host Microbe. 2015; 17(5):704-715.

[0083] 25. Huang Y J, Marsland B J, Bunyavanich S, et al. The microbiome in allergic disease: current understanding and future opportunities—2017 PRACTALL document of the American academy of allergy, asthma & immunology and the European academy of allergy and clinical immunology. J Allergy Clin Immunol. 2017; 139(4):1099-1110.

[0084] 26. Navarro J, Rainisio M, Harms H K, et al. Factors associated with poor pulmonary function: cross-sectional analysis of data from the ERCF. European Epidemiologic Registry of Cystic Fibrosis. Eur Respir J. 2001; 18(2):298-305.

[0085] 27. David J, Bell R E, Clark G C. Mechanisms of disease: host-pathogen interactions between *Burkholderia* species and lung epithelial cells. Front Cell Infect Microbiol. 2015; 5:80.

[0086] 28. Aanaes K. Bacterial sinusitis can be a focus for initial lung colonisation and chronic lung infection in patients with cystic fibrosis. *J Cyst Fibros.* 2013; 12(5uppl 2):51-520.

[0087] 29. Lucas S K, Yang R, Dunitz J M, Boyer H C, Hunter R C. 165 rRNA gene sequencing reveals site-specific signatures of the upper and lower airways of cystic fibrosis patients. *J Cyst Fibros.* 2018; 17 (2):204-212.

1. A method for treating sinusitis in a subject, the method comprising:

administering to the subject an effective amount of a composition that stimulates growth or activity of a genus of bacteria that is decreased relative to a control subject not having sinusitis and/or inhibiting growth or activity of a genus of bacteria that is increased relative to the control subject.

2. The method according to claim **1**, wherein the composition comprises a bacterial composition.

3. The method according to claim **1**, wherein the sinusitis is chronic rhinosinusitis (CRS).

4. The method according to claim **1**, wherein the subject has asthma.

5. The method according to claim **1**, wherein the composition stimulates growth or activity of the genus *Corynebacterium.*

6. The method according to claim **1**, wherein the composition stimulates growth or activity of the genus *Peptoniphilus.*

7. The method according to claim **1**, wherein the composition stimulates growth or activity of the genus *Corynebacterium* and the genus *Peptoniphilus.*

8. The method according to claim **1**, wherein the composition comprises bacteria from the genus *Corynebacterium* and/or the genus *Peptoniphilus.*

9. The method according to claim **4**, further comprising inhibiting growth or activity of the genus *Streptococcus.*

10. The method according to claim **4**, further comprising inhibiting growth or activity of the genus *Burkholderia.*

11. The method according to claim **4**, further comprising inhibiting growth or activity of the genus *Streptococcus* and the genus *Burkholderia.*

12. The method according to claim **1**, wherein the composition comprises a bacterial composition that is harvested from a normal subject.

13. The method according to claim **12**, wherein the bacterial composition is processed to isolate bacteria from the genus *Corynebacterium* and/or the genus *Peptoniphilus.*

14. The method according to claim **1**, wherein the composition is administered intranasally.

15. The method according to claim **1**, wherein the composition comprises a liquid, foam, cream, spray, powder, gel, or absorbent material.

16. The method according to claim **1**, wherein a microbiome of the subject is analysed before administering the composition.

17. The method according to claim **1**, wherein a microbiome of the subject is analysed after the administration of the composition.

18. A composition comprising a bacterial composition comprising bacteria from the genus *Corynebacterium* and/or the genus *Peptoniphilus.*

19. The composition according to claim **18**, wherein the bacterial composition consists of bacteria from the genus *Corynebacterium* and the genus *Peptoniphilus.*

20. The composition according to claim **18**, wherein the composition further comprises a second effective compound comprising an antibiotic.

21. The composition according to claim **18**, wherein the composition further comprises an agent that is bacteriostatic or bactericidal to the genus *Streptococcus* and/or the genus *Burkholderia.*

* * * * *